

# OPT-IES1012P Series Industrial Media Converter

2\*10/100Base-Tx(PoE) to 100Base-Fx RoHS Compliant







# >>Description

OPT-IES1012P is OPTONE produced unmanaged 3-port PoE switches, providing 1 Fast Ethernet fiber optional port and 2 10/100Base-TX PoE ports compliant with IEEE802.3af and IEEE802.3at. While transmitting data over the cable, each PoE port can output 30 watts to PoE terminals directly, eliminating the need for additional wiring. OPT-IES1012P supports wide operating temperature range from -40°C to 85°C, metal housing with IP40 protection class and redundant power inputs, becoming an economical and harsh environment resistant solution for the ITS, video surveillance and other automation applications.

## >>Main Features

- Green Ethernet solution with ultra low power consumption design
- Both standard and wide operating temperature
- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x auto-negotiation
- IEEE 802.3at, IEEE 802.3af PoE standard compliance
- Supports auto MDI/MDIX function
- Status LED for easy monitoring of device status
- Supports up to 9K Byte Jumbo frames
- Support 2k MAC address table
- · Supports DIN-Rail or hang wall mounting
- Support dual power supply backup
- · IP40 protection class



# >>Specifications

#### **Interface**

- 2 x Ethernet+PoE port (RJ45) 10/100Base-Tx
- 1 x Optical port (1x9) 100Base-Fx

## **Optical Port**

- · Available for 1310nm and 1550nm Single mode, and 1310nm Multi mode
- Transfer Distance: up to 120km
- · Connectors: SC, ST, FC optional
- Fiber core: 8.3μm, 8.7μm, 9μm and 10μm on single-mode fiber; 50, 62.5 and 100µm on multi-mode fiber

#### **Ethernet Port**

- Cable: Cat 5/5e/6 UTP cable
- · Available speed: force 10Mbps, force 100Mbps and autodetective 10/100Mbps Full-Duplex and Half-Duplex autonegotiation
- · Connectors: RJ-45 Connector; MDI/MDI-X connection autosensing

#### **Standard**

- IEEE802.3 (10Base-T)
- IEEE802.3u (100Base-TX)
- IEEE802.3x (Flow control)
- IEEE802.3af (Power over Ethernet Standard)
- IEEE802.3at (Power over Ethernet enhancements Standard)

#### **Switch Properties**

• MAC Table: 2K

• Packet Buffer: 1Mbit

• Switching Delay: <5µs

## **LED Indicators**

Power Status, FX Link/Act, TX Link/Act

#### **PoE Specification**

• Power Output: PoE 48V DC

• PoE Power Supply type: End-Span

• Power Pin Assignment: 1/2(+), 3/6(-)

• PoE Power Budget: Each port provides max 30W feed power

## **Power Requirement**

• Input: 48V-57V DC

• Consumption: MAX 3.8W(no PD), 63.8W(full PD)

• Overload Protection: Support

• Reverse Connection Protection: Support

Redundancy Protection: Support

### **Physical Characteristics**

· Housing: Metal enclosure

• Protection Class: IP40

• Dimensions: 33.5 x 118 x 86mm (Excluding the connector, DIN rail and component for panel mounting)

· Weight: 0.36kg

· Installation: DIN-Rail or Panel mounting

#### **Environmental Limits**

• Operating Temperature: -40°C to 85°C

• Storage Temperature: -40°C to 85°C

• Operating Humidity: 10% to 95% RH (non-condensing)

• Storage Humidity: 5% to 95% RH (non-condensing)

#### **Agency Approvals**

FCC Part 15 of Class A & CE approved

#### **Industrial Standard**

• EMI: FCC/CE/LVD/EMC

• EMS:

IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air)

IEC61000-4-3 (RS): 10V/m (80MHz-2GHz)

IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM;

Data Port: ±2kV

IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-

IEC61000-4-16 (Common mode conduction): 30V (cont.),

300V (1s)

• Shock: IEC 60068-2-27

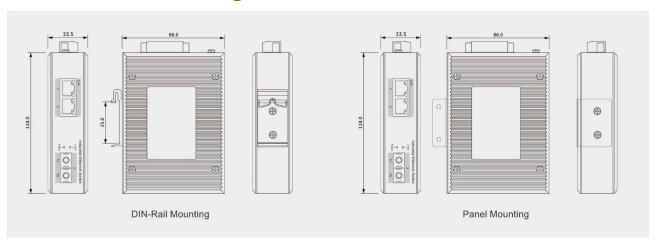
• Free Fall: IEC 60068-2-32

Vibration: IEC 60068-2-6

## Warranty

5 years

# >> Mechanical Drawing





# >>Ordering Information

OPT-IES1012PM02 2*10/100Base-Tx(PoE) to 100Base-Fx, Multi mode, 2Km, SC/ST/FC option	nal
OPT-IES1012PS20 2*10/100Base-Tx(PoE) to 100Base-Fx, Single mode, 20Km, SC/ST/FC opt	ional:
Single Fiber	
OPT-IES1012PW20 2*10/100Base-Tx(PoE) to 100Base-Fx, Bi-Directional, 20Km, SC/ST/FC options of the control of th	otional

# >>Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by OPTONE before they become applicable to any particular order or contract. In accordance with the OPTONE policy of continuous improvement specifications may change without notice.

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